



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/965,107

09/25/2001

Stewart K. Hester

21216-05686

3961

47372

7590

07/12/2005

BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 GATEHOUSE ROAD
SUITE 100 EAST
FALLS CHURCH, VA 22042-1248

EXAMINER

PAYNE, DAVID C

ART UNIT

PAPER NUMBER

2638

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,107

Applicant(s)

HESTER, STEWART K.

Examiner

David C. Payne

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed March 28, 2005 have been fully considered but they are not persuasive. Examiner is unable to respond to the applicant's amended claims since the arguments presented only substantially deal with the Obara reference. Applicant's argument's only deal with the alleged deficiencies of the Obara reference and do not substantively address the Wing So or Chang references, other than to state that they fail to teach each and every feature of the invention as required.
2. In order for the examiner to properly address the alleged deficiencies of the aforementioned prior art, the applicant is instructed to address each reference of the office action.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1-10, 12-17, 19-25, 27-32, 34-39 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obara et al. US 2003/0037247 A1 in view of Wing So US 2002/0109879 (So).

Re claims 1, 3, 4, 12, 13, 19, 20, 21, 27, 28, 34, 35, 41, 43

An optical communications network having a plurality of nodes comprising: a first node (9 of Figure 4) including a first administrative node processor module (not illustrated in Figure 4, see 13 of Figure 2 as an example) for performing administrative functions (reading and storing of encrypted data, e.g., ¶ 0076), and a persistent storage module

Art Unit: 2638

(5a of Figure 4) for storing administrative information; a second node (10 of Figure 4) including a second administrative node processor module (not illustrated in Figure 4, see 13 of Figure 2 as an example) for performing administrative functions; Obara disclosed a wide area network (WAN) (24 of Figure 4) for communication between first and second nodes.

Obara does not disclosed an optical signaling channel for carrying administrative information from the second node to the first node for storage in the persistent storage module located in the first node, the optical signaling channel traveling on a path including one or more optical transmission media between the nodes.

So disclosed using a signaling channel to convey control information (see e.g., page 15 ¶ 0343). It would have been obvious to one of ordinary skill in the art at the time of invention to use the So signaling channel to convey control information in the Obara invention so that administrative information is detectable apart from data which facilitates operation of the network and avoids confusion by having control appear in an expected well defined place.

Re claim 2,

Obara disclose the signaling channel modules as claimed (e.g., 38 of Figure 2).

Re claim 5, Obara does not disclose wherein the node element module is embodied within a circuit pack. Furthermore, it is not entirely clear which of the node element modules the applicant is referring to. It would have been obvious to one of ordinary skill in the art at the time of invention to embody the elements in circuit packs. It is extremely well known in the art to make electronic and optical element on circuit packs

Art Unit: 2638

given that circuit packs are modular, able to be handled and fit within frames of equipment.

Re claim 6, the aforementioned modified invention of Obara and So further disclosed wherein the administrative information carried by the optical signaling channel has a data transmission protocol of asynchronous transfer mode. (See So e.g., ¶ 0410)

Re claims 7, 14, 22, 29 and 36

The aforementioned invention further disclosed wherein the optical signaling channel is carried on a single wavelength that travels on the path between the nodes (See So e.g., ¶ 0339).

Re claims 8, 15, 23, 30 and 37

The aforementioned invention further disclosed wherein the wavelength is a wavelength outside of the band of the payload data wavelengths that travel on the path. (See So e.g., ¶ 0339)

Re claims 9, 16, 24, 31, and 38

The aforementioned invention further disclosed the wavelength is a wavelength inside of the band of the payload data wavelengths that travel on the optical path. (See So e.g., ¶ 0330)

Re claims 10, 17, 25, 32 and 39

The aforementioned invention further disclosed wherein the optical signaling channel is embodied in one or more divisions of a time-division multiplexed signal carried on one or more wavelengths. (See So e.g., ¶ 0330)

Re claim 42, the aforementioned modified invention of Obara and So further disclosed (queries) read and write request commands (see Obara e.g., ¶ 0066).

Art Unit: 2638

3. Claims 1, 3, 4, 11, 12, 18, 19, 26, 27, 33, 34, 35, 40, 41, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obara et al. US 2003/0037247 A1 in view of Chang et al. US 6,160,651 (Chang).

Re claims 1, 3, 4, 12, 19, 27, 34, 35, 41, 43

An optical communications network having a plurality of nodes comprising: a first node (9 of Figure 4) including a first administrative node processor module (not illustrated in Figure 4, see 13 of Figure 2 as an example) for performing administrative functions (reading and storing of encrypted data, e.g., ¶ 0076), and a persistent storage module (5a of Figure 4) for storing administrative information; a second node (10 of Figure 4) including a second administrative node processor module (not illustrated in Figure 4, see 13 of Figure 2 as an example) for performing administrative functions; Obara disclosed a wide area network (WAN) (24 of Figure 4) for communication between first and second nodes.

Obara does not disclosed an optical signaling channel for carrying administrative information from the second node to the first node for storage in the persistent storage module located in the first node, the optical signaling channel traveling on a path including one or more optical transmission media between the nodes.

Chang disclosed using a signaling channel to convey control information (See Chang, col./line: 21/30-35). It would have been obvious to one of ordinary skill in the art at the time of invention to use the So signaling channel to convey control information in the Obara invention so that administrative information is detectable apart from data which facilitates operation of the network and avoids confusion by having control appear is an expected well defined place.

Re claims 11, 18, 26, 33, and 40

The aforementioned invention further disclosed wherein the optical signaling channel is carried as a sub-carrier frequency superimposed on one or more payload data wavelengths that travel on the path between the nodes. (See Chang, col./line: 21/30-35)

Art Unit: 2638

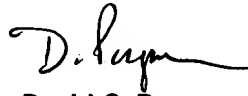
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp


David C. Payne
Patent Examiner
AU 2638